

ABSTRACT OF THE DISCLOSURE

In a method for photo-electrochemical etching of a semiconductor sample, the semiconductor sample is brought in contact with an electrolyte liquid. The contact area formed thereby is illuminated through the electrolyte liquid with UV light. The photo-current created by UV light irradiation at the contact area is measured. To increase the etching quality, a jet of fresh electrolyte liquid is repeatedly applied to the contact area. A device for carrying out the method includes a container to be filled with an electrolyte liquid, a UV source for illuminating the semiconductor sample with UV light through the electrolyte liquid, and a measuring instrument for measuring the photo-current created during UV light irradiation of the contact area. Further provided are an inlet for supplying fresh electrolyte liquid, directed towards the semiconductor sample, and a device attached to the inlet for repeated production of electrolyte fluid jets, directed towards the semiconductor sample.